GEOMETRY Name _____ Period _____

Chapter 8 Review Packet

TARGET A & B

Find the sum of the measure of the interior angles, sum of the exterior angles, and one of each for the following regular polygons.

1.) **Pentagon** # sides = _____

Sum of the interior angles = _____

Measure of one interior angle = _____

Sum of the exterior angles = _____

Measure of one exterior angle = _____

2.) **18-gon** # sides = _____

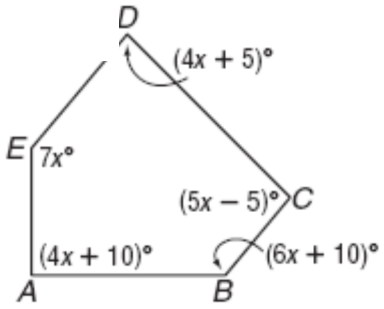
Sum of the interior angles = _____

Measure of one interior angle = _____

Sum of the exterior angles = _____

Measure of one exterior angle = _____

3.) Solve for the variable and the following angle measures.



x = _____

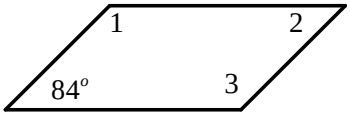
m∠C = _____

m∠E = _____

TARGET C & D

For 4 & 5 , solve for the missing angles in the parallelogram.

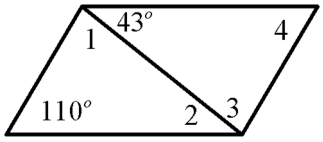
4.)



∠1 = _____ ∠2 = _____

∠3 = _____

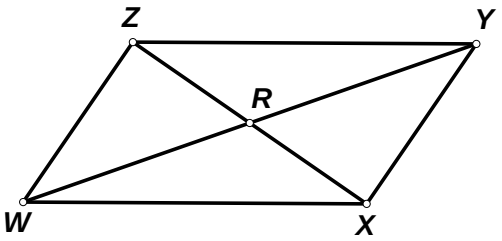
5.)



∠1 = _____ ∠2 = _____

∠3 = _____ ∠4 = _____

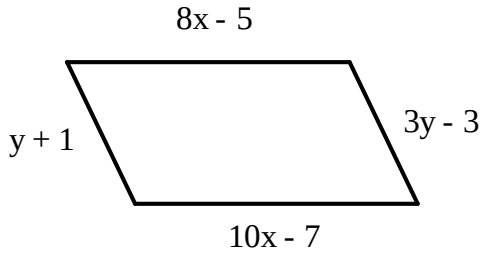
6.) Use the parallelogram to complete the following statements.



$\overline{WR} \cong$ _____ $\angle WZX \cong$ _____

$\overline{XY} \cong$ _____ $\angle WZY \cong$ _____

7.) Solve for the values of x and y that would make this a parallelogram.

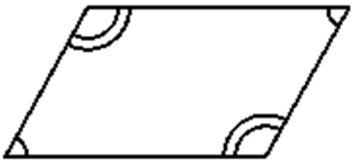


$x =$ _____

y = _____

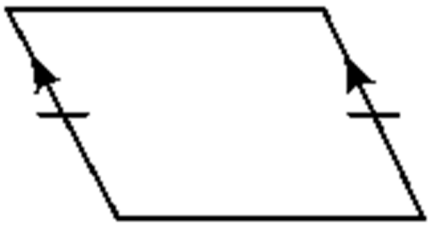
8.) Determine if the following quadrilaterals are parallelograms. Give a reason why or why not.

a.

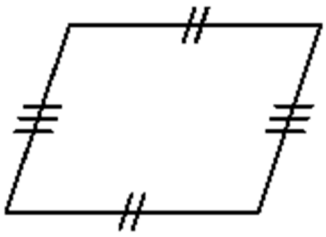


b.

c.

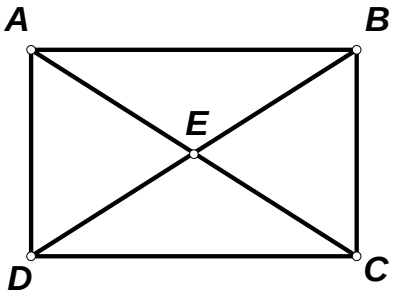


d.



TARGET E

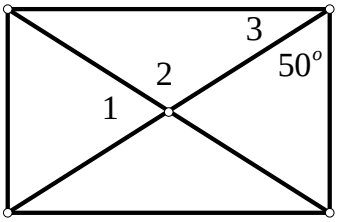
9.) Find x and the length of $\overline{AC}$ in the rectangle.



AC = 6x - 7 x = _____

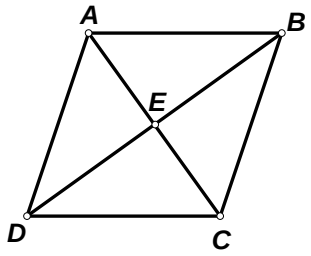
BD = 3x - 1 AC = _____

10.) Find the measure of $\angle 1$, $\angle 2$ and $\angle 3$ in the rectangle.



$\angle 1$ = _____ $\angle 2$ = _____ $\angle 3$ = _____

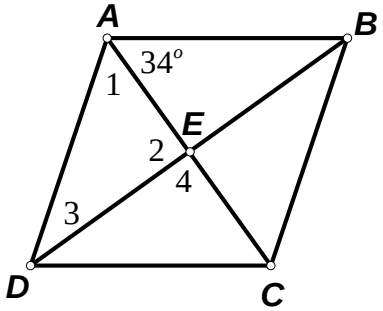
11.) Use the rhombus to complete the following statements.



$\overline{DE} \cong$ _____ $\angle ADB \cong$ _____

$m\angle AED$ = _____ True or false: $\overline{AC} \cong \overline{BD}$

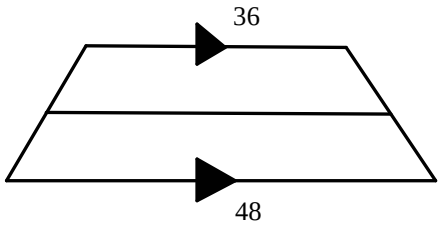
12.) Find the measure of the numbered angles in the rhombus



$\angle 1$ = _____ $\angle 2$ = _____

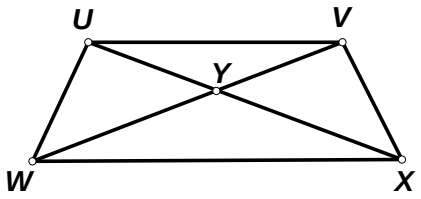
$\angle 3$ = _____ $\angle 4$ = _____

13.) Find the length of the median in the trapezoid



median_____

14.) Use the isosceles trapezoid to complete the following statements.

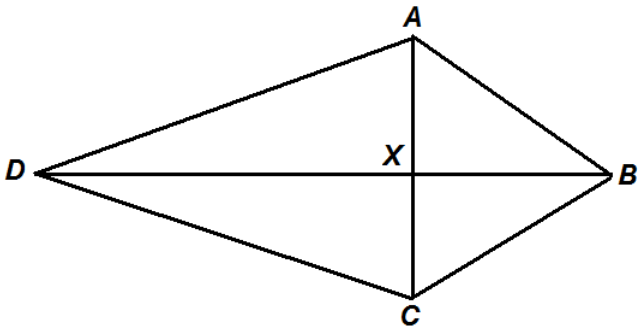


$\overline{UV} \parallel$ _____ $\overline{VX} \cong$ _____

$\angle WXV \cong$_____ True or false: $\overline{UX} \cong \overline{VW}$

$\angle WUV \cong$_____ True or false: $\overline{UY} \cong \overline{YX}$

15.) Use kite ABCD to find the following measurements if m∠CDX = 24°, $\overline{AD} = 21$ and $\overline{AC} = 16$



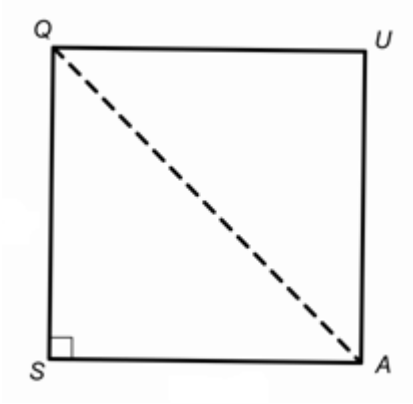
m∠ADX = _____

m∠AXD = _____

$\overline{DC}$ = _____

$\overline{AX}$ = _____

16.) SQUA is a square. If $SQ = 7x - 4$ and $QU = 4x + 11$, find the value of x & the sides and angles.



x = _____

SQ = _____

UA = _____

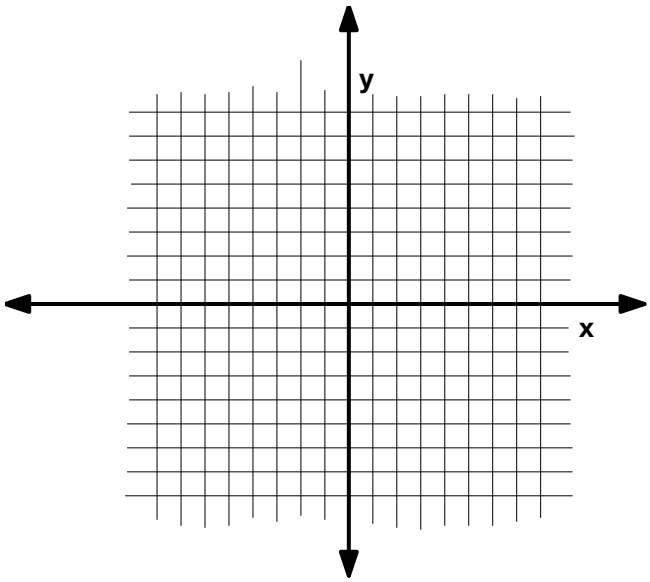
m∠SQA = _____

m∠UAS = _____

QA = _____

TARGET F

17.) Graph the points: W (-6, -5), X (-1, -4), Y (0, -1), Z (-5, -2).



a) Find the **slope** for the following sides.

WX = _____

XY = _____

YZ = _____

WZ = _____

What does the slope tell you about the quadrilateral?

W (-6, -5), X (-1, -4), Y (0, -1), Z (-5, -2).

b) Find the length of each side using the **distance formula**.

WX = _____

XY = _____

YZ = _____

WZ = _____

What does the distance/length tell you about the quadrilateral?

c) Find the midpoint of the diagonals

Midpoint of WY = _____

Midpoint of XZ = _____

d) What type of special quadrilateral is WXYZ? Why?